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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------------|------------------------|
| 10/590,119 | 06/11/2007 | Lin Zhi | 3800024.00324 / 1112US | 1033 |
| 77202 | 7590 | 04/15/2011 | | |
| K&L Gates LLP 3580 Carmel Mountain Road Suite 200 San Diego, CA 92130 | | | EXAMINER CHANDRAKUMAR, NIZAL S | |
| | | | ART UNIT 1625 | PAPER NUMBER |
| | | | MAIL DATE 04/15/2011 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|---------------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/590,119 | Applicant(s) ZHI ET AL. | |
| | Examiner NIZAL CHANDRAKUMAR | Art Unit 1625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/14/2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25,27-35,62-69,72-78 and 82-86 is/are pending in the application.
- 4a) Of the above claim(s) 69 and 72-77 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25,27-35,62-68,78 and 82-86 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/13/2010, 1/29/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants response filed 2/14/2011 is acknowledged.

Claims 1-25, 27-35, 62-68, 78, 82-86 are under examination.

Applicants are reminded of the subject matter being prosecuted shown on page 4 of office action filed 11/3/2010.

Claims 1-25, 27-35, 62-68, 78, 82 are examined to the extent that they read on the elected subject matter:

CRARB. compounds of formula II wherein n is 0, Z is

To facilitate prosecution, Applicant is encouraged to delete non-elected subject matter from the claims.

Response to Remarks:

Amendments to claims overcome the previously presented rejections under Claim Rejections - 35 USC § 102, Claim Rejections - 35 USC § 103 and Claim Rejections - 35 USC § 112.

Claim 6 and 7, 28, 31-33, 84,

New Rejections

Claim Rejections - 35 USC § 102

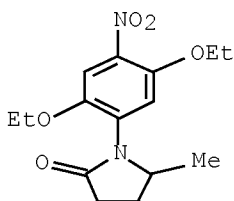
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Sues et al. GB 1177545.

Sues et al. teach



RN 23196-17-0

R1 NO2

R2 heteroalkyl

RA of R3 is C2 alkyl

R4 H

R5 H

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R6a and R7a together form a carbonyl

R9 C1 alkyl

R10 H

R12 H

R13 H

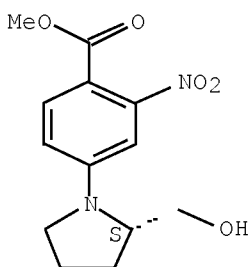
RA and RB of Z are hydrogen.

Likewise,

Claims 1-4, 8-25, 27, 30, 34, 63-68, 78, 82, 83, 85, 86 are rejected under 35

U.S.C. 102(b) as being anticipated by Yamada et al. WO 2001083460.

Yamada et al. teach RN 372117-90-3



corresponds to compounds of formula II

R1 CO₂RA wherein RA is C1 alkyl

R2 is NO₂

R5, R4 and R5 are Hydrogens

RA and RB are Hydrogens for CRARB

R9 is hydrogen or hydroxyalkyl (substituted alkyl)

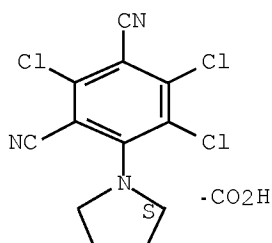
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Likewise

Claims 1-5, 8-25, 27, 30, 34, 63-68, 78, 82, 83, 85, 86 are rejected under 35

U.S.C. 102(b) as being anticipated by Sunjic et al. US 6437167.

Sunjic et al. teach RN 253867-83-3



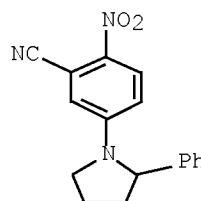
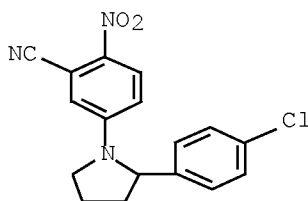
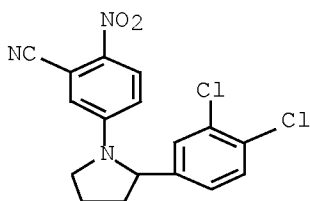
corresponds to compounds of formula II wherein R1 is CN, R2, R3, R4 and R5 are halo, RA of R9 is H.

Similarly,

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Elslager et al.

Journal of Medicinal Chemistry (1972), 15(8), 827-36. (STN abstract is provided,

Original article is being procured).



R1 is NO2,

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R2 is CN

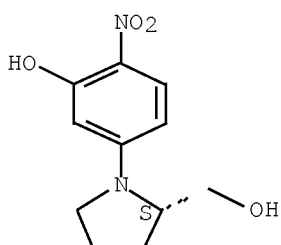
R3, R4, R5, H

R9 is optimally substituted aryl

Likewise,

Claims 1, 22, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Jin et al. Chemistry of Materials (1992), 4(5), 963-5. (STN abstract is provider, Original article is being procured).

Jin et al. teach RN 115416-47-2



Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-25, 27-35, 62-68, 78, 82-86 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 language relating to 'pharmaceutically acceptable ester, or amide thereof' is vague and indefinite, because these terms implies more than what is positively defined by variables , for example $\text{CO}_2\text{R}^{\text{A}}, \text{CONR}^{\text{A}}\text{R}^{\text{B}}$.

Dependent claims listed above do not cure the problem of the base claims.

Additionally in claims 62 and 84, it is unclear what are the esters and amides of the first named compounds.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIZAL CHANDRAKUMAR whose telephone number is (571)272-6202. The examiner can normally be reached on 8.30 AM - 4.30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571 0272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nizal S Chandrakumar/
Primary Examiner, Art Unit 1625